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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,502	10/09/2003	Antoni S. Murcia	10019308-5	9854

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HEWLETT-PACKARD COMPANY
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EXAMINER

HSIEH, SHIH WEN

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,502

Applicant(s)

MURCIA ET AL.

Examiner

Shih-wen Hsieh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 21-30 is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-9-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Page 7, line 1 please change "102" into "202". Because 102 stands for the wiper, and 202 stands for the print head, and it is the head to move not the wiper.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 7-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-13 of U.S. Patent No. 6,644,775 B2 ('775). Although the conflicting claims are not identical, they are not patentably distinct from each other because both cases deal with servicing a staggered print heads with a staggered servicing stations. Below is a table of comparison to indicate the obviousness of the claims in the instant application over those in the patent ('775):

<u>10/682,502</u>	<u>6,644,775 B2</u>
7. A printhead cleaning unit for use in an inkjet printing device, the print head cleaning unit comprising a plurality of components to service a particular one printhead of a plurality of staggered printheads, the components comprising a spittoon, a wiper, a capping unit, and a solvent dispenser, the wiper being positioned adjacent to the capping unit, the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and adjacent to the solvent dispenser.	2. An inkjet printhead cleaning unit comprising: a proximal and a distal end; and a plurality of components to service a particular one printhead of a plurality of staggered printheads, the components comprising a spittoon at the distal end, a wiper at the proximal end, a capping region at the proximal end, and a solvent dispenser at the proximal end, the wiper being positioned adjacent to the capping unit, the capping unit being offset from center with respect to the spittoon region, the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and adjacent to the solvent dispenser.
8. A printhead cleaning unit as recited in claim 7, wherein the particular one printhead is a printhead comprising cyan, magenta, yellow, or black ink.	3. An inkjet printhead cleaning unit as recited in claim 2, wherein the particular one printhead is selected from a cyan ink printhead, a magenta ink printhead, a yellow ink printhead, or a black ink printhead.
9. A method to service printheads in a staggered configuration, the method	4. In a color inkjet imaging device, a method to service a plurality of

<p>comprising: moving a service station pallet to a forward position, the service station comprising printhead cleaning units in a staggered configuration, each cleaning unit comprising a spittoon; repositioning the printheads into the service station such that each printhead is over a corresponding spittoon; and spitting ink, by each printhead, into a corresponding spittoon.</p> <p>11. A method as recited in claim 9, comprise a wiper a solvent dispenser, and a capping unit, and wherein the wiper is positioned adjacent to the capping unit, the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and wherein the cleaning units further adjacent to the solvent dispenser.</p>	<p>staggered printheads, the method comprising: moving a service station pallet to a forward position, the service station comprising a plurality of staggered printhead cleaning units, each of the cleaning units comprising a respective spittoon reservoir; repositioning the staggered printheads into the service station such that each printhead is over a corresponding spittoon reservoir; spitting, by the printheads, ink into corresponding spittoon reservoirs; and wherein the cleaning units comprise a wiper a solvent dispenser, and a capping unit, the wiper being positioned adjacent to the capping unit, the capping unit being offset from center with respect to the spittoon region, the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and adjacent to the solvent dispenser.</p>
<p>10. A method as recited in claim 9, wherein the staggered printheads comprise a cyan ink printhead, a magenta ink printhead, a yellow ink printhead, and/or a black ink printhead.</p>	<p>5. A method as recited in claim 4, wherein the staggered printheads further comprise a cyan ink printhead, a magenta ink printhead, a yellow ink printhead, and/or a black ink printhead.</p>
<p>12. A method as recited in claim 9, wherein each cleaning unit further comprises a wiper positioned near a second end of the cleaning unit and wherein the method further comprises moving the service station pallet rearward to wipe each of the printheads clean of any ink residue on a corresponding wiper.</p>	<p>6. A method as recited in claim 4, wherein the cleaning units further comprise a proximal and a distal end, each respective spittoon reservoir being at the distal end of a corresponding cleaning unit, the cleaning units further comprising a wiper at the proximal end, and wherein the method further comprises moving the service station pallet rearward to wipe each of the printheads clean of any ink residue on a corresponding wiper.</p>
<p>13. A method as recited in claim 9,</p>	<p>7. A method as recited in claim 4,</p>

<p>wherein each cleaning unit further comprises a wiper and a solvent dispenser positioned near a second end of the cleaning unit, and wherein the method further comprises: moving the service station pallet to a full rearward position such that corresponding solvent nibs are pressing against leading edges of respective staggered printheads, each solvent nib being associated with a respective solvent dispenser; and delivering solvent to the staggered printheads via the corresponding solvent nibs.</p>	<p>wherein the cleaning units further comprise a proximal and a distal end, the spittoon being at the distal end, the cleaning units further comprising a wiper at the proximal end and a solvent dispenser at the proximal end, and wherein the method further comprises: moving the service station pallet to a full rearward position such that corresponding solvent wicks are pressing against leading edges of respective staggered printheads; and delivering solvent to the staggered printheads.</p>
<p>14. A method as recited in claim 9, wherein each cleaning unit further comprises, positioned near a second end of the cleaning unit: a wiper, a solvent dispenser and a capping region, and wherein the method further comprises: moving the service station pallet to a printhead capping position; and sealing each of the staggered printheads with a respective cap at a respective capping region.</p>	<p>8. A method as recited in claim 4, wherein the cleaning units further comprise a proximal and a distal end, the spittoon being at the distal end, the cleaning units further comprising a wiper at the proximal end, a solvent dispenser at the proximal end, and a capping region at the proximal end, and wherein the method further comprises: moving the service station pallet to a printhead capping position; and sealing each of the staggered printheads.</p>
<p>15. A computer-readable medium to service staggered printheads in an inkjet-imaging device, the computer-readable medium comprising computer-executable instructions for: moving a service station pallet to a forward position, the service station comprising printhead cleaning units in a staggered configuration, each of the printhead cleaning units comprising a spittoon reservoir; repositioning the staggered printheads into the service station such that each printhead is over a corresponding spittoon reservoir; and spitting ink, by each printhead, into a corresponding spittoon reservoir.</p>	<p>9. A computer-readable medium to service a plurality of staggered printheads in a color inkjet imaging device, the computer-readable medium comprising computer-executable instructions for: moving a service station pallet to a forward position, the service station comprising a plurality of staggered printhead cleaning units, the cleaning units comprising a spittoon reservoir; repositioning the staggered printheads into the service station such that each printhead is over a corresponding spittoon; spitting, by the printheads, ink into the corresponding spittoons; and wherein the cleaning</p>

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<p>17. A computer-readable medium as recited in claim 15, wherein the printhead cleaning units further comprise a wiper a solvent dispenser, and a capping unit, and wherein the wiper is positioned adjacent to the capping unit; the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and adjacent to the solvent dispenser.</p>	<p>units comprise a wiper a solvent dispenser, and a capping unit, the wiper being positioned adjacent to the capping unit, the capping unit being offset from center with respect to the spittoon region, the capping unit comprising a long and a short axis, a first end of the long axis being positioned adjacent the spittoon region, and a second end of the long axis unit being collinear and adjacent to the solvent dispenser.</p>
<p>16. A computer-readable medium as recited in claim 15, wherein the staggered printheads comprise a cyan ink printhead, a magenta ink printhead, a yellow ink printhead, and/or a black ink printhead.</p>	<p>10. A computer-readable medium as recited in claim 9, wherein the staggered printheads further comprise a cyan ink printhead, a magenta ink printhead, a yellow ink printhead, and/or a black ink printhead.</p>
<p>18. A computer-readable medium as recited in claim 15, wherein each of the printhead cleaning units further comprise a wiper, and wherein the computer-executable instructions further comprise instructions for moving the service station pallet rearward to wipe each of the printheads clean of any ink residue on a corresponding wiper.</p>	<p>11. A computer-readable medium as recited in claim 9, wherein the cleaning units further comprise a proximal and a distal end, the spittoon being at the distal end, the cleaning units further comprising a wiper at the proximal end, and wherein the computer-executable instructions further comprise instructions for moving the service station pallet rearward to wipe each of the printheads clean of any ink residue on a corresponding wiper.</p>
<p>19. A computer-readable medium as recited in claim 15, wherein each of the printhead cleaning units further comprise a wiper and a solvent dispenser, and wherein the computer-executable instructions further comprise instructions for: moving the service station pallet to a full rearward position such that corresponding solvent nibs are pressing against leading edges of respective staggered printheads, each solvent nib being associated with a respective solvent</p>	<p>12. A computer-readable medium as recited in claim 9, wherein the cleaning units further comprise a proximal and a distal end, the spittoon being at the distal end, the cleaning units further comprising a wiper at the proximal end and a solvent dispenser at the proximal end, and wherein the computer-executable instructions further comprise instructions for: moving the service station pallet to a full rearward position such that corresponding solvent wicks are pressing against</p>

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dispenser; and delivering solvent to the staggered printheads via the corresponding solvent nibs.	leading edges of respective staggered printheads; and delivering solvent to the staggered printheads.
20. A computer-readable computer-executable instructions further comprise instructions for: medium as recited in claim 15, wherein the moving the service station pallet to a printhead capping position; and sealing each of the staggered printheads with a respecting cap in a respective capping region.	13. A computer-readable medium as recited in claim 9, wherein the cleaning units further comprise a proximal and a distal end, the spittoon being at the distal end, the cleaning units further comprising a wiper at the proximal end, a solvent dispenser at the proximal end, and a capping region at the proximal end, and wherein the computer-executable instructions further comprise instructions for: moving the service station pallet to a printhead capping position; and sealing each of the staggered printheads.

A discussion to the obviousness between claims is as follows:

In regard to:

Claim 7:

This claim corresponds to claim 2 of patent ('775).

In the instant application, the staggered print heads, the service components, and the particular layout of the capping unit are all the same as those in claim 2 of patent ('775).

Claim 8:

Corresponding to claim 3 of patent ('775).

Claims 9 and 11:

Corresponding to claim 4 of patent ('775).

Claim 10:

Corresponding to claim 5 of patent ('775).

Claim 12:

Corresponding to claim 6 of patent ('775). The second end in the instant application corresponds to the proximal end in patent ('775).

Claim 13:

Corresponding to claim 7 of patent ('775). The solvent nibs corresponds to the solvent wicks in patent ('775).

Claim 14:

Corresponding to claim 8 of patent ('775).

Claims 15 and 17:

Corresponding to claim 9 of patent ('775).

Claim 16:

Corresponding to claim 10 of patent ('775).

Claim 18:

Corresponding to claim 11 of patent ('775).

Claim 19:

Corresponding to claim 12 of patent ('775).

Claim 20:

Corresponding to claim 13 of patent ('775).

Allowable Subject Matter

4. Claims 1-6 and 21-30 are allowed.

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5. The following is a statement of reasons for the indication of allowable subject matter:

In regard to:

Claims 1-6:

The primary reason for the allowance of claims 1-6 is the inclusion of the limitation of a processor coupled to a memory, the memory comprising computer program instructions executable by the processor for collectively moving one or more of the staggered printheads along a single actuation axis from a respective spittoon in a particular service station to a print zone without colliding with one of the cleaning units. It is this limitation found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Claims 21-28:

The primary reason for the allowance of claims 21-28 is the inclusion of the method step of collectively moving one or more of staggered printheads along a single actuation axis from a respective spittoon in a particular service station to a print zone without colliding with any portion of a cleaning unit of cleaning units, each cleaning unit comprising components to service a particular one of the staggered printheads, each cleaning unit being offset from an adjacent cleaning unit to form a staggered cleaning unit configuration. It is this step found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Claims 29 and 30:

The primary reason for the allowance of claims 29 and 30 is the inclusion of the limitation of means for collectively moving one or more of staggered printheads along a single actuation axis to a respective spittoon in a particular service station from a print zone without colliding with any portion of a cleaning unit of cleaning units, each cleaning unit comprising components to service a particular one of the staggered printheads, each cleaning unit being offset from an adjacent cleaning unit to form a staggered cleaning unit configuration. It is this limitation found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

SHIH-WEN HSIEH
PRIMARY EXAMINER


Shih-wen Hsieh
Primary Examiner
Art Unit 2861

SWH


March 22, 2006